

## WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, WILLIS E. HURD, acting in charge]

## NORTH ATLANTIC OCEAN, OCTOBER 1939

By H. C. HUNTER

*Atmospheric pressure.*—The data now available indicate that the pressure averaged less than normal over most of the North Atlantic, and that the deficiency was particularly large over the northwestern portion. There was a moderate excess near the Azores and a slight excess near the coasts of Florida and the Middle Gulf States.

The extremes of pressure in the vessel reports at hand were 1034.5 and 941.4 millibars (30.55 and 27.80 inches.) The high reading was noted on the Dutch liner *Statendam* late on the forenoon of the 25th, near 51° N., 21° W. The low reading was recorded on the American steamship *F. W. Abrams*, near the center of the month's chief disturbance of tropical origin. The position was 26°36' N., 66°48' W., or approximately midway between the Mona Passage and Bermuda; and the hour was 7:50 a. m. of the 15th.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, October 1939

Station	Average pressure	Departure	Highest	Date	Lowest	Date
	<i>Millibars</i>	<i>Millibars</i>	<i>Millibars</i>		<i>Millibars</i>	
Julianehaab, Greenland <sup>1</sup>	1,000.6	-0.5	1,019	9	980	17
Horta, Azores	1,021.2	+1.6	1,031	24	1,004	2
Belle Isle, Newfoundland <sup>2</sup>			1,032	30	981	29
Halifax, Nova Scotia <sup>3</sup>	1,015.7	-1.6	1,030	3,30	989	23
Nantucket	1,016.0	-1.6	1,030	18	990	31
Hatteras	1,017.6	-0.4	1,030	18	1,000	31
Turks Island	1,013.0	-1.2	1,017	19, 25, 26	1,005	13, 14
Key West	1,014.2	+0.3	1,020	26	1,006	31
New Orleans	1,017.9	+1.0	1,023	17	1,014	11

<sup>1</sup> For 21 days.

<sup>2</sup> For 17 days.

<sup>3</sup> For 22 days.

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

*Cyclones and gales.*—Disturbances of extratropical origin affected the North Atlantic considerably more than during the preceding month. During the first 2 days of October gales were encountered by several vessels between the Azores and the strait of Gibraltar; also during the first 5 days several gales were reported between Newfoundland and the English Channel.

Early on the 4th a low of slight energy was centered a short distance to southward of Nantucket, whence it

traveled eastward, gaining in strength, and becoming the southwest portion of an extensive low system. The morning of the 8th found a strong low near 52° N., 23° W. Whole gales were noted by two vessels when within its influence and lesser gales by several other ships.

During the final few days of October many parts of the western North Atlantic to northward of the 40th parallel were considerably disturbed, also some areas just east of the United States coast. On the morning of the 31st a long low system extended from a short distance northeast of Cape Cod southwestward to the western Caribbean where a tropical disturbance was centered. Apart from this latter center, the chief low was near Hatteras on the morning of the 31st and near Nantucket on the evening of that day. There were several reports of strong to whole gales from vessels near the United States coast as a result of this low system.

*Tropical cyclones.*—One important hurricane, that of the 12th to 18th, occurred in October. The disturbance at first lay near the Leeward Islands and to northeastward of Puerto Rico, with no great strength, but hurricane force was developed before it reached the waters just east of Bermuda and continued until the storm was lost to observation east of northern Newfoundland. A full account of this storm appears elsewhere in this issue of the REVIEW.

Just before the month ended a depression over the western Caribbean gained marked strength. It was near Grand Cayman Island on the 30th, and thereafter followed an unusual course until November 6. An account of this storm will appear in a subsequent issue of the REVIEW.

*Fog.*—There was decidedly little fog, as far as reports indicate. The squares 40° to 45° N., 65° to 70° W., and 35° to 40° N., 70° to 75° W., both along the northeastern coast of the United States, led in reports, having 4 days each; while two different Grand Banks squares and one square in the northwestern Gulf of Mexico had 3 days with fog. There was scarcely a report of fog from any locality east of the 45th meridian.

Compared with the preceding September, October had less fog nearly everywhere save in the northern Gulf of Mexico, where no fog had been reported in September. Except for this region and the vicinity of Delaware Bay the present October seems to have been less foggy than normal for the month; the deficiency was marked over the southern Grand Banks region, where from 8 to 10 days with fog are to be expected in October.